

ABSTRACT

A new method is disclosed for evaluating the efficiency of a sweep for removing cuttings from a borehole in a subterranean formation during a drilling operation. The method evaluates sweep efficiency on a "mass in" versus "mass out" basis. The method uses downhole density readings taken with a pressure-while-drilling tool inserted in the drill string. Measurements of hydrostatic pressure are converted into equivalent circulating density measurements which in turn are used in calculating the sweep efficiency. The method affords real time estimates at the wellsite of the quantity of formation cuttings brought out of a wellbore by a sweep.